REMARKS

Claims 14-15 and 23 are cancelled; claims 24-27 are new; thus, claims 1-13, 16-22, and 24-27 are all the claims pending in the application. Claims 1-23 stand rejected on prior art grounds; Figure 4 is objected. Applicants respectfully traverse these rejections based on the following discussion.

I.   The Objections to the Drawings

The Office Action asserts that "Figure 4 fails to label the arrows branching off the decision boxes 22, 24, 27 and 29 with the word 'Yes' or 'No'" (Office Action, p. 2, para. 4). Applicants submit herewith a "Replacement Sheet" for Figure 4. In view of the foregoing, the Examiner is respectfully requested to reconsider and withdraw the objections.

II.   The Prior Art Rejections

Claims 1-8, 10-13, 16-18, and 23 stand rejected under 35 U.S.C. §102(b) as being anticipated by Baker, et al. ("The Mirage NFS Router," A technical repot published by University of Arizona in 2002), hereinafter referred to as Baker. Claim 9 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Baker, in view of Katsurashima, et al. ("NAS Switch: A Novel CIFS Server Virtualization," 2003), hereinafter referred to as Katsurashima. Claims 14-15 and 19-22 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Baker, in view of IETF RFC 1094 ("Network File System Protocol Specification," version 2.0), hereinafter referred to as RFC 1094 and IETF RFC 791 ("Internet Protocol,"), hereinafter referred to as RFC 791. Applicants respectfully traverse

these rejections based on the following discussion.

The claimed invention provides a communications network, wherein a client computer is adapted to send requests for storage to a communication virtualizer. The client computer is adapted to receive response packets from the communication virtualizer, wherein each response packet from includes a client identifier. In the rejection, the Office Action argues that the prior art of record discloses many features of the claimed invention. However, the "replies" of Baker do not include a client identifier. Instead, Baker merely discloses that the "replies" are mapped to a virtual file handle (VFH) before the reply is forwarded to the client. Furthermore, the response to the Remote Procedure Call (RPC) request in RFC 1094 does not include a client identifier. Instead, RFC 1094 merely discloses testing and timing the response from the server. Therefore, as explained in greater detail below, Applicants respectfully submit that the prior art of record does not teach or suggest the claimed invention.

A.   The Rejections Based on Baker

Applicants traverse the rejections because Baker fails to teach or suggest the claimed features "wherein each response packet from said store computers includes said client identifier" as defined by independent claims 1 and 12.

The Office Action asserts that the "replies" of Baker disclose the "response packets" of the claimed invention. However, Applicants submit that the "replies" of Baker do not include a "client identifier" (independent claims 1 and 12). Instead, Baker merely discloses

that the "replies" are mapped to a virtual file handle (VFH) before the reply is forwarded to the client (Baker, p. 4, §3.2).

More specifically, as described on page 4, §3.2, of Baker, one of the core functions of the Mirage router is to map between the file handles produced by the Mirage router and the file handles produced by the NFS servers (Figure 5). The clients cannot be presented with the NFS server handles directly because there is no guarantee that the NFS servers won't generate the same handle for different objects. Mirage must perform a reverse mapping on NFS replies. Each physical file handle (PFH) in a reply must be mapped to the appropriate VFH before the reply is forwarded to the client. The most common reply to contain a PFH is the reply to the Lookup request that is used to resolve a file name into a file handle. Mirage looks up the PFH contained in the reply in the handle table and rewrites the NFS reply with the correct VFH before forwarding the reply to the client. Nevertheless, Baker fails to disclose that the replies include a "client identifier" (independent claims 1 and 12).

To the contrary, as described in paragraph 0040 of Applicants' disclosure, a response may comprise multiple packets. Reference to paragraph numbers herein refer to the published patent application 2005/0198401, which are different than the paragraph numbers of the originally filed application. In a preferred embodiment, each packet comprising a response identifies the client 190, 200, 210 to which the response should be delivered. Upon receiving a packet comprising a response, a virtualizer 110, 120 forwards the packet to the client 190, 200, 210. When processing a multiple packet response, steps 8-11 of FIG. 3 are followed, except that steps 8-10 are redirected to response packet processing (rather than

response processing), and step 11 includes re-assembling the multiple response packets into a single response.

As further described in paragraph 0059 of Applicants' disclosure, at least one packet of the response includes the request identifier. The virtualizer 110, 120, upon receiving the packet containing the request identifier, creates a timestamp for the response, and records it along with the request identifier, the timestamp of the request, and any other parameters that were recorded. This data may be retrieved later for various purposes, including performance analysis.

Accordingly, Applicants submit that the "replies" of Baker do not include a "client identifier". Instead, Baker merely discloses that the "replies" are mapped to a virtual file handle (VFH) before the reply is forwarded to the client (Baker, p. 4, §3.2). Therefore, it is Applicants' position that Baker fails to teach or suggest the claimed features "wherein each response packet from said store computers includes said client identifier" as defined by independent claims 1 and 12. Further, it is Applicants' position that dependent claims 2-8, 10-11, 13, 16-18, and 24-27 are similarly patentable, not only because of their dependency from a patentable independent claims, but also because of the additional features of the invention they defined. In view of the foregoing, the Examiner is respectfully requested to reconsider and withdraw the rejections.

B.   The Rejections Based on Baker and Katsurashima

Applicants traverse the rejections because similar to Baker, Katsurashima fails to teach or suggest the claimed features "wherein each response packet from said store

computers includes a client identifier" as defined by independent claim 1 (from which claim 9 depends upon). Instead, Katsurashima merely discloses a "NAS Switch" (which the Office Action asserts teaches the "virtualizer" of the claimed invention) that can provide "responses by itself to client requests in CIFS packets without using an NAS unit [which the Office Action asserts teaches the "network-attached store computer" of the claimed invention]" (Katsurashima, p. 2, §2). Nevertheless, nothing within Katsurashima teaches that the "responses" include a client identifier (independent claim 1). Applicants submit that Katsurashima is provided by the Office Action for the mere purpose of illustrating a communication network comprises a storage access protocol comprising a Common Internet File System (CIFS) protocol (Office Action, p. 11, item 2). In view of the foregoing, the Examiner is respectfully requested to reconsider and withdraw the rejections.

      C.   The Rejections Based on Baker, RFC 1094, and RFC 791

Applicants traverse the rejections because similar to Baker, neither RFC 1094 nor RFC 791 teach or suggest the claimed features "wherein each response packet from said store computers includes a client identifier" as defined by independent claim 12 (from which claims 14, 15, and 19-22 depend upon).

The Office Action asserts that RFC 1094 discloses the "response packets" of the claimed invention. However, Applicants submit that the response to the Remote Procedure Call (RPC) request in RFC 1094 does not include a "client identifier" (independent claim 1). Instead, RFC 1094 merely discloses testing and timing the response from the server.

More specifically, RFC 1094 discloses that RPC provides a version number with each RPC request to the server (RFC 1094, §2). The RPC services allow server response testing and timing (RFC 1094, §2.2.1. and §A.5.1.). For example, if the transport protocol drops the response for a Remove File operation, upon retransmission the server may return an error code of NFSERR_NOENT instead of NFS_OK. But if the server keeps around the last operation requested and its result, it could return the proper success code.

Furthermore, Applicants submit that RFC 791 does not teach or suggest a response to a client request, wherein the response includes a client identifier. RFC 791 is introduced by the Office Action for the mere purpose of illustrating an internet protocol for transmitting datagrams from sources to destination, wherein the datagrams may be fragmented (Office Action, pp. 13-15, item 3). Specifically, as described in section 1.1 of RFC 791, the internet protocol provides for transmitting blocks of data called datagrams from sources to destinations, where sources and destinations are hosts identified by fixed length addresses. The internet protocol also provides for fragmentation and reassembly of long datagrams. Nevertheless, nothing within RFC 791 discloses sending responses to the "sources" (which the Office Action asserts teaches the "client computers" of the claimed invention) that include a source identifier. In view of the foregoing, the Examiner is respectfully requested to reconsider and withdraw the rejections.

II.   Formal Matters and Conclusion

In view of the foregoing, Applicants submit that claims 1-13, 16-22, and 24-27, all the claims presently pending in the application, are patentably distinct from the prior art of

record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary. Please charge any deficiencies and credit any overpayments to Attorney's Deposit Account Number 09-0441.

Respectfully submitted,

Dated: January 3, 2008

/Duane N. Moore/
Duane N. Moore
Registration No. 53,352

Gibb & Rahman, LLC
2568-A Riva Road, Suite 304
Annapolis, MD 21401
Voice: (410) 573-6501
Fax: (301) 261-8825
Customer Number: 29154